

## CLAIMS :

5 1. A surface acoustic wave component comprising at least one surface acoustic wave device encapsulated in a package, said device being made on the surface of a piezoelectric substrate by means of interdigitated electrodes powered by first conductive contacts internal to the surface of the substrate, characterized in that the package comprises, in addition to the substrate:

- a first layer located on the substrate and hollowed out locally at least at the level of the active surface of the surface acoustic wave device;

10 - a printed circuit covering the entire first layer, said printed circuit comprising second external conductive contacts;

- conductive via holes going through the unit formed by the first layer/printed circuit and connecting the first internal conductive contacts to the second external conductive contacts.

15 2. Surface acoustic wave component according to claim 1, characterized in that the first layer is made of photosensitive resin.

3. Surface acoustic wave component according to <sup>claim 1</sup> ~~one of the~~ ~~claims 1 or 2~~, characterized in that the package has a second layer, called an adhesive layer, located between the first layer and the printed circuit.

20 4. Surface acoustic wave component according to <sup>claim 1</sup> ~~one of the~~ ~~claims 1 to 3~~, characterized in that the external face of the substrate and the side faces of the component are covered with a third layer that is hermetic.

25 5. Surface acoustic wave component according to <sup>claim 1</sup> ~~one of the~~ ~~claims 1 to 4~~, characterized in that the printed circuit is metallized on the surface.

6. Surface acoustic wave component according to <sup>claim 1</sup> ~~one of the~~ ~~claims 1 to 5~~, characterized in that the first layer has acoustic absorbent properties.

30 7. Method for the collective fabrication of surface acoustic wave components according to <sup>claim 1</sup> ~~one of the~~ ~~claims 1 to 6~~, comprising the making of surface acoustic wave devices on a piezoelectric substrate and comprising the following steps:

- the making of a first hollowed layer on all the surface acoustic wave devices;

35 - the bonding of a printed circuit to said first layer;

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- the making of via holes in the printed circuit and the first layer at the level of the first internal conductive contacts of the surface acoustic wave devices;

- the metallizing of the via holes and the defining of second external conductive contacts, said second contacts being connected to said first contacts by the metallized via holes;

- the cutting out of the assembly formed by the substrate, the first layer and the printed circuit so as to separate the surface acoustic wave components.

8. Method for the collective fabrication of components according to claim 7, characterized in that the making of the first hollowed layer is obtained by the preliminary deposition of a uniform layer, followed by the etching of said layer.

9. Method for the collective fabrication of components, according to claim 7, characterized in that the making of the first layer is obtained by the lamination of a previously hollowed out layer.

10. Method for the collective fabrication of modules of components according to <sup>Claim 7</sup> one of the claims 7 to 9, characterized in that the bonding of the printed circuit to the first layer comprises:

- the deposition of a second layer, known as an adhesive layer, on the printed circuit;
- the hot pressing of the printed circuit/second layer on the entire unit formed by the first layer and the piezoelectric substrate.

11. Method for the collective fabrication of components according to <sup>Claim 7</sup> one of the claims 7 to 10, characterized in that it comprises the making of a third layer, called a coating layer, on the lower face of the substrate and on the side faces of the component.

12. Method of collective fabrication according to claim 11, characterized in that the third layer is made by sputtering.

13. Method of collective fabrication according to claim 11, characterized in that the third layer is made by the vapor phase deposition of a parylene type polymer.

14. Method of collective fabrication according to claim 11, characterized in that the third layer is obtained by the deposition of a varnish.

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